

4. (Once Amended) The receiver of claim 1 wherein the differential receiver receives a reference voltage on a first differential input and an input voltage on a second differential input and wherein the switchable voltage supply circuit selects the differential receiver supply voltage for the single gate oxide differential receiver to be a voltage level higher than a maximum voltage level of the input voltage.

10. (Once Amended) An integrated differential receiver for an input/output pad comprising:

a single gate oxide differential receiver that receives a reference voltage on a first differential input and an input voltage on a second differential input;

a switchable voltage supply circuit, operatively coupled to the single gate oxide differential receiver, switchable through at least one control signal to select a differential receiver supply voltage for the single gate oxide differential receiver wherein at least one of the selected supply voltages is a voltage level higher than a maximum voltage level of the input voltage; and

an isolation output buffer operatively coupled to core logic.

14. (Once Amended) A method for controlling a voltage supply for a differential receiver comprising the steps of:

providing either of at least an I/O pad supply voltage or a reference supply voltage for a single gate oxide differential receiver based on a control signal such that the reference supply voltage is selected as the differential receiver supply voltage when the control signal indicates a maximum input signal voltage to be less than the second reference voltage, and

providing the I/O pad supply voltage as the differential receiver supply voltage when the control signal indicates a maximum input signal voltage to be greater than the second reference voltage.

18. (New) The receiver of claim 1 including an isolation output buffer operatively coupled to an output of the differential receiver and that outputs a signal. = (3)

19. (New) The receiver of claim 1 wherein the switchable voltage supply circuit provides either of at least an I/O pad supply voltage or a reference supply voltage for the differential receiver based on the control signal such that the reference supply voltage is selected as the differential receiver supply voltage when the control signal indicates a maximum input signal voltage to the single gate oxide differential receiver to be less than the reference supply voltage, and wherein the switchable voltage supply circuit provides the I/O pad supply voltage as the differential receiver supply voltage when the control signal indicates a maximum input signal voltage to be greater than the reference supply voltage.

20. (New) The receiver of claim 10 wherein the switchable voltage supply circuit provides either of at least an I/O pad supply voltage or a reference supply voltage for the differential receiver based on the control signal such that the reference supply voltage is selected as the differential receiver supply voltage when the control signal indicates a maximum input signal voltage to be less than the reference supply voltage, and wherein the switchable voltage supply circuit provides the I/O pad supply voltage as the differential receiver supply voltage when the control signal indicates a maximum input signal voltage to be greater than the reference supply voltage.

21. (New) The method of claim 14 including providing at least one of an I/O pad supply voltage and a reference supply voltage for a differential receiver based on the control signal such that the reference supply voltage is selected as the differential receiver supply voltage when the control signal indicates a maximum input signal voltage to be less than the second reference voltage, and providing the I/O pad supply voltage as the differential receiver supply voltage when the control signal indicates a maximum input signal voltage to be greater than the reference supply voltage.